Cisco IOS XRã,½ãƒ•ãƒˆã,¦ã,§ã,¢ã�®Border Gateway Protocol(BGP)å±žæ€§ã�«ã�Šã�‘ã,‹DoSè„†å¼±

Medium

ã,¢ãƒ‰ãƒ�ã,¤ã,¶ãƒªãƒ¼ID : cisco-sa-20200122-ios-xr-bgp-dos

åˆ�å…¬é–‹æ—¥ : 2020-01-22 16:00

ãƒ�ãƒ¼ã,¸ãƒ§ãƒ³ 1.0 : Final

CVSSã,¹ã,³ã,¢ : 8.6

å›žé�¿ç– : No workarounds available

Cisco ãƒ�ã,° ID : CSCvr69950

CVE-2019-15989

æ—¥æœ¬èªžã�«ã,ˆã,‹æƒ…å ±ã�¯ã€�è‹±èªžã�«ã,ˆã,‹åŽŸæ–‡ã�®é�žå…¬å¼�ã�

æ¦‚è¦�

Cisco IOS XRã,½ãƒ•ãƒˆã,¦ã,§ã,¢ã�®ãƒœãƒ¼ãƒ€ãƒ¼ã,²ãƒ¼ãƒˆã,¦ã,§ã,¤ãƒ—ãƒãƒˆã,³ãƒ«(BGP)æ©Ÿèƒ½ã�®å®Ÿè£…

ã�“ã�®è„†å¼±æ€§ã�¯ã€�ç‰¹å®šã�®BGPã,¢ãƒˆãƒªãƒ“ãƒ¥ãƒ¼ãƒˆã,’å�«ã,€BGPã,¢ãƒƒãƒ—ãƒ‡ãƒ¼ BGP ãƒ—ãƒã,»ã,¹ã,’äº^æœŸã�›ã�šå†�èµ·å‹•ã�•ã�›ã€�DoS çŠ¶æ…‹ã,’å¼•ã��ã��èµ·ã�“ã�™å�¯èƒ½æ€§ã�Œã�,ã,Šã�¾ã�™ã€,

ã,·ã,¹ã,³ã�® BGP å®Ÿè£…ã�¯ã€�æ˜Žç¤ºçš„ã�«å®šç¾©ã�•ã,Œã�¦ã�„ã,‹ãƒ”ã,¢ã�‹ã,‰å�—ä¿¡ã�™ã,‹ BGP ãƒˆãƒ©ãƒ•ã,£ãƒƒã,¯ã�®ã�¿ã,’å�—ã�'å…¥ã,Œã�¾ã�™ã€,ã�“ã�®è„†å¼±æ€§ã,’ã,¨ã,¯ã,¹ãƒ—ãƒã,

ã,·ã,¹ã,³ã�¯ã�“ã�®è„†å¼±æ€§ã�«å¯¾å‡¦ã�™ã,‹ã,½ãƒ•ãƒˆã,¦ã,§ã,¢ã,¢ãƒƒãƒ—ãƒ‡ãƒ¼ãƒˆã,’ãƒªãƒªãƒ¼

ã�“ã�®ã,¢ãƒ‰ãƒ�ã,¤ã,¶ãƒªã�¯ã€�æ¬¡ã�®ãƒªãƒ³ã,¯ã,ˆã,Šç¢ºèª�ã�§ã��ã�¾ã�™ã€,
https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20200122-ios-xr-bgp-dos

è©²å½“è£½å“�

è„†å¼±æ€§ã�®ã�,ã,‹è£½å“�

ã

�“ã�®è„†å¼±æ€§ã�¯ã€�Cisco IOS XRã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢ã�®è„†å¼±æ€§ã�Œå˜åœ¨ã�™ã‚‹ãƒªãƒªãƒ¼ã‚¹ã‚’å®Ÿè¡Œã�—ã€�BGPã�C

ã‚·ã‚¹ã‚³ã�§ã�¯ã€�ã�“ã�®è„†å¼±æ€§ã�Œ Cisco IOS XR 32 ãƒ“ãƒƒãƒˆ ã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢ã�¨ Cisco IOS XR 64 ãƒ“ãƒƒãƒˆ ã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢ã�®ä¸¡æ–¹ã�«å½±éŸ¿ã‚’ä¸Žã�ˆã‚‹ã�“ã�¨ã‚’ç¢ºèª�ã�—ã�¾ã�—ã�Ÿã€‚

å…¬é–‹æ™‚ç‚¹ã�§è„†å¼±æ€§ã�Œå˜åœ¨ã�—ã�¦ã�„ã�ŸCisco IOS XRã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢ãƒªãƒªãƒ¼ã‚¹ã�«ã�¤ã�„ã�¦ã�¯ã€�ã�“ã�®ã‚¢ãƒ‰ãƒ�ã‚¤ã‚¶ãƒªã�®ã€

ãƒ‡ãƒ�ã‚¤ã‚¹ã�®è¨å®šã�«è„†å¼±æ€§ã�Œã�‚ã‚‹ã�‹ã�©ã�†ã�‹ã�®ç¢ºèª

ãƒ‡ãƒ�ã‚¤ã‚¹ã�Œ BGP ç”¨ã�«è¨å®šã�•ã‚Œã�¦ã�„ã‚‹ã�‹ã�©ã�†ã�‹ã‚’ç¢ºèª�ã�™ã‚‹ã�«ã�¯ã€�ç®¡ç�†è€…ã�¯ CLI ã�§ **show running-config router bgp EXEC ã‚³ãƒžãƒ³ãƒ‰ã‚’ä½¿ç”¨ã�§ã��ã�¾ã�™ã€‚**ãƒ«ãƒ¼ã‚¿ã�Œ BGP ç”¨ã�«è¨å®šã�•ã‚Œã�¦ã�„ã‚‹å ´å�ˆã€�ã�“ã�®ã‚³ãƒžãƒ³ãƒ‰ã�¯å‡ºåŠ›ã‚’è¿”ã�—ã�¾ã�™ **running-config router bgpã‚³ãƒžãƒ³ãƒ‰**ã�®å‡ºåŠ›ã�®ä¸€éƒ¨ã‚’ç¤ºã�—ã�¦ã�„ã�¾ã�™ã€‚

```
<#root>

#show running-config router bgp

router bgp 65536
â€¦
```

è„†å¼±æ€§ã‚’å�«ã‚“ã�§ã�„ã�ªã�„ã�“ã�¨ã�Œç¢ºèª�ã�•ã‚Œã�Ÿè£½å“�

ã�“ã�®ã‚¢ãƒ‰ãƒ�ã‚¤ã‚¶ãƒªã�®è„†å¼±æ€§ã�®ã�‚ã‚‹è£½å“�ã‚»ã‚¯ã‚·ãƒ§ãƒ³ã�«è¨˜è¼‰ã�•ã

ã‚·ã‚¹ã‚³ã�¯ã€�ã�“ã�®è„†å¼±æ€§ã�Œ Cisco IOS ã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢ã€�Cisco IOS XE ã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢ã€�Cisco NX-OS ã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢ã�«ã�¯å½±éŸ¿ã‚’ä¸Žã�ˆã�ªã�„ã�“ã�¨ã‚’ç¢ºèª�ã�—ã�¾ã�—ã�Ÿã€‚

è©³ç´°

ã�“ã�®è„†å¼±æ€§ã�®ä¸�æ£åˆ©ç”¨ã‚’å�¯èƒ½ã�«ã�™ã‚‹ç‰¹å®šã�®ä¸�æ£ã�ªBGPã‚¢ãƒƒãƒ—

å›žé�¿ç–

ã�“ã�®è„†å¼±æ€§ã�«å¯¾å‡¦ã�™ã‚‹å›žé�¿ç–ã�¯ã�‚ã‚Šã�¾ã�›ã‚“ã€‚

ä¿®æ£æ¸ˆã�¿ã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢

ã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢ã�®ã‚¢ãƒƒãƒ—ã‚°ãƒ¬ãƒ¼ãƒ‰ã‚’æ¤œè¨Žã�™ã‚‹éš›ã�«ã�¯ã€�[ã‚·ã‚¹ã‚³ã�®ã‚»ãƒ
Security Advisories and Alertsï¼‰]
ãƒšãƒ¼ã‚¸ã�§å…¥æ‰‹ã�§ã��ã‚‹ã‚·ã‚¹ã‚³è£½å“�ã�®ã‚¢ãƒ‰ãƒ�ã‚¤ã‚¶ãƒªã‚’å®šæœŸçš„ã�«å�‚ç
ã‚½ãƒªãƒ¥ãƒ¼ã‚·ãƒ§ãƒ³ã‚’ç¢ºèª�ã�—ã�¦ã���ã� ã�•ã�„ã€‚

ã�„ã�šã‚Œã�®å ´å�ˆã‚‚ã€�ã‚¢ãƒƒãƒ—ã‚°ãƒ¬ãƒ¼ãƒ‰ã�™ã‚‹ãƒ‡ãƒ�ã‚¤ã‚¹ã�«å���å�ˆ†ã�ªãƒ¡ãƒ¢ã
Technical Assistance
Centerï¼ˆTACï¼‰ã‚‚ã�—ã��ã�¯å¥'ç´„ã�—ã�¦ã�„ã‚‹ãƒ¡ãƒ³ãƒ†ãƒŠãƒ³ã‚¹ãƒ—ãƒãƒ�ã‚¤ãƒ€ãƒ¼ã�«

ä¿®æ£æ¸ˆã�¿ãƒªãƒªãƒ¼ã‚¹

ã�"ã�®ãƒ‰ã‚ãƒ¥ãƒ¡ãƒ³ãƒˆã�®ç™ºè¡Œæ™‚ç‚¹ã�§ã€�ã‚·ã‚¹ã‚³ã�¯Cisco IOS
XRã‚½ãƒ•ãƒˆã‚¦ã‚§ã‚¢ãƒªãƒªãƒ¼ã‚¹7.0.2ã€�7.1.1ã€�ã�Šã‚ˆã�³7.2.1ã�§ã�"ã�®è„†å¼±æ€§ã‚'ä¿®æ

ç™ºè¡Œã�®æ™‚ç‚¹ã�§ã€�æ¬¡ã�®è¡¨ã�® SMU
ã�Œä½¿ç"¨å�¯èƒ½ã�§ã�—ã�Ÿã€‚ä»–ã�®ãƒ—ãƒ©ãƒƒãƒˆãƒ•ã‚©ãƒ¼ãƒ ã�Šã‚ˆã�³ãƒªãƒªãƒ¼ã‚¹ã�
SMU
ã‚'å¿…è¦�ã�¨ã�™ã‚‹ã�Šå®¢æ§˜ã�¯ã€�ã‚µãƒ�ãƒ¼ãƒˆéƒ¨é–€ã�«ã�"é€£çµ¡ã��ã� ã�•ã�„ã€

IOS XR ãƒªãƒªãƒ¼ã‚¹	Platform	SMU å�� ¹
6.6.1	NCS5500	ncs5500-6.6.1.CSCvr91660
6.6.1	ASR9K-X64	asr9k-x64-6.6.1.CSCvr91660
6.6.1	NCS540	ncs540-6.6.1.CSCvr91660
6.6.1	NCS6K	ncs6k-6.6.1.CSCvr91660
6.6.2	ASR9K	asr9k-px-6.6.2.CSCvr91676
6.6.2	ASR9K-X64	asr9k-x64-6.6.2.CSCvr91676
6.6.2	CRS	
6.6.2	NCS5K	
6.6.2	XRV9K	xrv9k-6.6.2.CSCvr91676
6.6.25	NCS540	
6.6.25	NCS540L	
6.6.25	NCS560	ncs560-6.6.25.CSCvr91676
6.6.25	NCS5500	ncs5500-6.6.25.CSCvr91676
7.0.1	ASR9K-X64	asr9k-x64-7.0.1.CSCvr91676
7.0.1	NCS1K	
7.0.1	NCS5K	

IOS XR ãƒªãƒªãƒ¼ã,¹	Platform	SMU å�� [1]
7.0.1	NCS6K	
7.0.1	NCS540	
7.0.1	NCS540L	
7.0.1	NCS560	
7.0.1	NCS5500	
7.0.1	XRV9K	

1.ã�“ã�®ã,¢ãƒ‰ãƒ�ã,¤ã,¶ãƒªã�«è¨˜è¼‰ã�•ã,Œã�¦ã�„ã,‹è„†å¼±æ€§ã�«å¯¾ã�™ã,‹ä¿®æ£ã

CSCvr91660

ã�«ã�¯ã€�CSCvr84254ã€�CSCvr74986ã€�CSCvr74413ã€�CSCvr80793ã€�CSCvr83742ã€�CSC

CSCvr69950 ã�®ä¿®æ£ãƒ—ãƒã,°ãƒ©ãƒ ã�Œå�«ã�¾ã,Œã�¦ã�„ã�¾ã�™ã€,

CSCvr91676

ã�«ã�¯ã€�CSCvr84254ã€�CSCvr74986ã€�CSCvr74413ã€�CSCvr80793ã€�CSCvr83742ã€�CSC

CSCvr69950 ã�®ä¿®æ£ãƒ—ãƒã,°ãƒ©ãƒ ã�Œå�«ã�¾ã,Œã�¦ã�„ã�¾ã�™ã€,

ä¿®æ£æ¸ˆã�¿ã,½ãƒ•ãƒˆã,¦ã,§ã,¢ãƒªãƒªãƒ¼ã,¹ã�®è©³ç´°ã�«ã�¤ã�„ã�¦ã�¯ã€�ã�“ã�®ã,¢ãƒ‰ãƒ

Cisco.com ã�® Software Center

ã�‹ã,‰ã,½ãƒ•ãƒˆã,¦ã,§ã,¢ã,'ãƒ€ã,¦ãƒ³ãƒãƒ¼ãƒ‰ã�™ã,‹ã�«ã�¯ã€�æ¬¡ã�®æ‰‹é †ã,'å®Ÿè¡Œã�—

1. [ã�™ã�¹ã�¦ã,'å�‚ç…§ï¼ˆBrowse Allï¼‰] ã,'ã,¯ãƒªãƒƒã,¯ã�—ã�¾ã�™ã€,
2. **[IOSã�Šã,ˆã�³NX-OSã,½ãƒ•ãƒˆã,¦ã,§ã,¢ï¼ˆIOS and NX-OS Softwareï¼‰] > [IOS XR] > [IOS XRã,½ãƒ•ãƒˆã,¦ã,§ã,¢ï¼ˆIOS XR Softwareï¼‰] > [ã,ªãƒ—ãƒ†ã,£ã,«ãƒ«ãƒ�ãƒƒãƒˆãƒ¯ãƒ¼ã,ãƒ³ã,°ï¼ˆOptical Networkingï¼‰] ã�¾ã�Ÿã�¯ [ãƒ«ãƒ¼ã,¿ï¼ˆRoutersï¼‰]** ã,'é�¸æŠžã�—ã�¾ã�™ã€,
3. è£½å“�ã,»ãƒ¬ã,¯ã,¿ã�®å�³å�´ã�®ãƒšã,¤ãƒ³ã�‹ã,‰ã€�é�©å^‡ã�ªè£½å“�ã�¨ãƒ¢ãƒ‡ãƒ«
4. è£½å“�ãƒšãƒ¼ã,¸ã�®å·¦ãƒšã,¤ãƒ³ã�‹ã,‰ãƒªãƒªãƒ¼ã,¹ã,'é�¸æŠžã�—ã�¾ã�™ã€,

ä¸�æ£å^©ç"¨äº‹ä¾‹ã�¨å…¬å¼�ç™ºè¡¨

Cisco Product Security Incident Response Teamï¼ˆPSIRTï¼‰ã�¯ã€�æœ¬ã,¢ãƒ‰ãƒ�ã,¤ã,¶ãƒªã�«è¨˜è¼‰ã�•ã,Œã�¦ã�„ã,‹è„†å¼±æ€§ã�

å‡ºå…¸

ã�"ã�®è„†å¼±æ€§ã�¯ Cisco TAC ã,µãƒ�ãƒ¼ãƒˆã,±ãƒ¼ã,¹ã�®è§£æ±ºä¸ã�«ç™ºè¦‹ã�•ã,Œã�¾ã�—ã�Ÿã€,

URL

https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20200122-ios-xr-bgp-dos

æ”¹è¨‚å±¥æ´

ãƒ�ãƒ¼ã‚¸ãƒ§ãƒ³	èª¬æ˜Ž	ã‚»ã‚¯ã‚·ãƒ§ãƒ³	ã‚¹ãƒ†ãƒ¼ã‚¿ã‚¹	æ—¥ä»˜
1.0	åˆ�å›žå…¬é–‹ãƒªãƒªãƒ¼ã‚¹	-	Final	2020 å¹´ 1 æœˆ 22 æ—¥

åˆ©ç”¨è¦�ç´„

æœ¬ã‚¢ãƒ‰ãƒ�ã‚¤ã‚¶ãƒªã�¯ç„¡ä¿�è¨¼ã�®ã‚‚ã�®ã�¨ã�—ã�¦ã�”æ��ä¾›ã�—ã�¦ã�Šã‚Šã€

æœ¬ã‚¢ãƒ‰ãƒ�ã‚¤ã‚¶ãƒªã�®æƒ…å ±ã�Šã‚ˆã�³ãƒªãƒ³ã‚¯ã�®ä½¿ç”¨ã�«é–¢ã�™ã‚‹è²¬ä»»ã�®ä¸€

ã�¾ã�Ÿã€�ã‚·ã‚¹ã‚³ã�¯æœ¬ãƒ‰ã‚ãƒ¥ãƒ¡ãƒ³ãƒˆã�®å†…å®¹ã‚’äºˆå‘Šã�ªã�—ã�«å¤‰æ›´ã�—ã�

æœ¬ã‚¢ãƒ‰ãƒ�ã‚¤ã‚¶ãƒªã�®è¨˜è¿°å†…å®¹ã�«é–¢ã�—ã�¦æƒ…å ±é…�ä¿¡ã�® URL

ã‚’çœ�ç•¥ã�—ã€�å�˜ç‹¬ã�®è»¢è¼‰ã‚„æ„�è¨³ã‚’æ–½ã�—ã�Ÿå ´å�ˆã€�å½“ç¤¾ã�Œç®¡ç�

ã�“ã�®ãƒ‰ã‚ãƒ¥ãƒ¡ãƒ³ãƒˆã�®æƒ…å ±ã�¯ã€�ã‚·ã‚¹ã‚³è£½å“�ã�®ã‚¨ãƒ³ãƒ‰ãƒ¦ãƒ¼ã‚¶ã‚’å¯¾è±¡ã